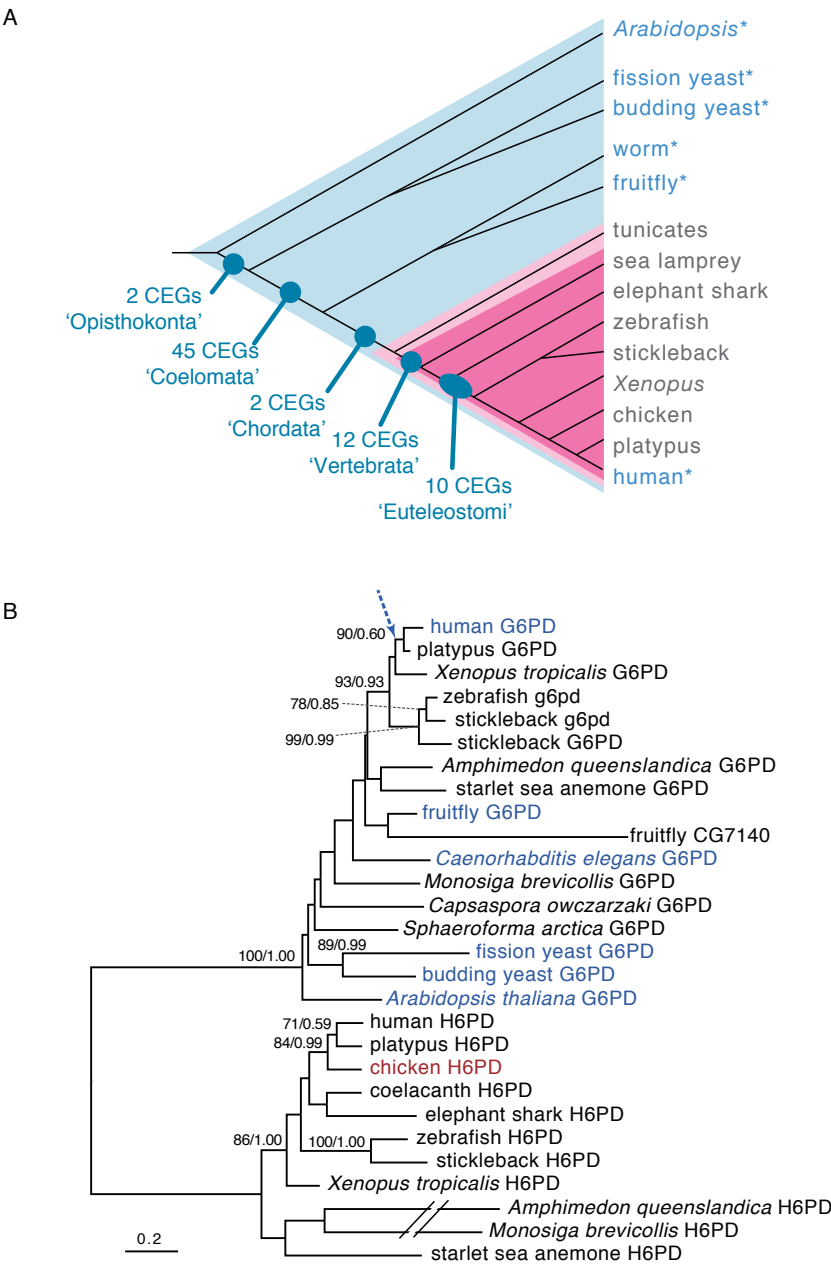A

B

Figure S3. Paralogs in the CEGs

(**A**) Duplication events in CEGs in the lineages leading to vertebrates and early

vertebrates. Based on the gene trees provided by Ensembl, 71 duplication events were

observed in 64 CEGs. The taxon names were given by Ensembl. (**B**) Molecular

phylogenetic tree of G6PD/H6PD genes inferred in a maximum-likelihood framework

based on 239 amino acid sites unambiguously aligned. This phylogeny shows that the

chicken gene identified by CEGMA as a member of KOG0563 (red) is not orthologous

to G6PD (blue) but is included in the group of H6PD genes, which duplicated before the

split between the choanoflagellate and metazoan lineages. A blue arrowhead indicates

the branch from which a chicken G6PD ortholog would be splitting off. Bootstrap

probabilities over 70 in the maximum-likelihood analysis and posterior probabilities

based on a Bayesian framework are shown at the nodes, in order.